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ABSTRACT

People represent the real hidden resource of the nation. In spite of mechanization and technological developments, 'the person' still represents the major facet of productivity, and 'people' comprise the very purpose of education. In Ohio, an attempt has been made to develop a career continuum as a thrust in education to lead youth to a point of career choice; provide at the high school level a means of preparation for work or further education; and provide a continuing education program throughout adult life for either technical education, collegiate education, upgrading existing work, or retraining for new occupations. The vocational program is a broad program in which any boy or girl who wants to enroll can find a place. During the 1972-73 Ohio school year, 123,000 youth were enrolled in the career motivation, orientation, and exploration programs in Grades K-10. (WM)

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REGIONAL PROGRAMMING FOR DIFFERENTIAL NEEDS:

VOCATIONAL EDUCATION IN OHIO

Byrl R. Shoemaker

Director of Vocational Education, Ohio

[1973]

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REGIONAL PROGRAMMING FOR DIFFERENTIAL NEEDS: VOCATIONAL EDUCATION IN OHIO

Byrl R. Shoemaker
Director of Vocational Education, Ohio

CHAPTER 1 A Concept of a Career Education Continuum

Since the turn of the century the quantity and speed of change has continued to increase. As we approach the three quarter mark of the century, the pace is both frantic and frightening. Such change has caused or made possible, depending upon how you look at it, the great social and economic concerns that we face today. Such massive changes have been extremely difficult for the public education system of our nation. This system has not only failed to adjust to such social and economic changes, but it hasn't even suspected the amount of change necessary if it is to remain a viable institution in a technological age.

Our system of education is in danger of being unable to achieve its stated goals. Terms such as accountability, evaluation, educational redesign are rampant as the schools attempt to communicate with both the public and legislators responsible to the public. These terms are frightening to educators as they too often attempt to meet the crisis by repackaging the same old stuff in different modules of time or presented with the Madison Avenue approach through audio-visual media.

We seem to note growth of a new dirty word in the world. The fact that it is a new dirty word strikes fear instead of disgust into the hearts of most of us. This new dirty word is the American "dollar." Daily it

becomes worth less and less. $60 billion of these dollars are floating around overseas with no place to light and lurking as a continual threat to our economy and our viable position in the world.

It is likely that PL 90-576, the Vocational Education Amendments of 1968, is the most significant piece of educational legislation that has been passed since the Land Grant Act. This piece of legislation, based upon categorical aid and growing out of a National Council for Vocational Education study, pointed up the concerns of people for changes in education which reflected not only changes needed in vocational education, but concerns for all education. Within these Amendments, we saw a thrust to insure that service would be provided for disadvantaged youth; for handicapped youth; for inner-city families; for consumers; for adults; for those enrolled in high school and post-high school vocational or technical education; for redirection of teacher education program efforts and for a broad expansion of vocational and technical education services so that all youth and all adults could have an opportunity to a vocational or technical education of high quality. These Amendments grew out of understanding that for every 100 young people who start elementary school, seventy-five will complete high school and fifteen will graduate from college. The fact that eighty-five percent of the young people will earn their living without a collegiate degree, combined with the fact that by 1975 only five percent of the jobs will be available for unskilled work, should strike a note of fear in both youth and adults, business and industry, labor and management and educators, and the general public.

As we look at the future of our nation, it rests upon our ability to produce at a level which can compete for dollars not only within our country, but compete for the foreign dollars necessary for us to purchase the goods and services that we must have from other countries if we are to be viable.

Our ability to compete relates both to the skills and technical knowledge of our people and to the willingness of those people to use those skills efficiently and effectively in such a way as to be able to compete with goods and services produced in other countries.

I want to relate to you a sad story...sad, but true. The story was reported in Industry Week and is as follows:

> "We used to make I-Beam truck axles in our Cleveland plant. As wages and materials prices rose, we were priced out of the market," says Charles H. Smith, Jr., president of Litco Industries. "Recently we learned our former customer was planning to buy axles in Japan or Spain. We decided we would try to get the business for our plant in Brazil.
>
> Today we are making those axles there for delivery to the U. S. We found that we could buy the steel in Japan, ship it 12,000 miles to Brazil, unload and haul it 100 miles inland to our plant, produce the axles packed for export, ship them 6,000 miles to the U.S., pay 10 percent duty, plus 10 percent import charges since August 15, pay inland freight in the U. S. and deliver them to the customer more cheaply than we could make them in Cleveland five miles from our steel source."

This story indicates that jobs formerly performed by Americans were exported to Brazil and Japan, and foreign-flag shipping companies hauled the materials between the various countries. These jobs are lost to our city of Cleveland...to our country. Dollars flow to Japan and Brazil, but what can we sell them in return that isn't being made better and cheaper in some other country?

Superior output per man hour has always been the edge that the U. S. has held in relationship to other nations. This increased productivity per worker hour enabled us to have a higher standard of living because we truly represented an increased productivity as well as an increase in dollars per hour worked. In one generation we have gone from first to dead-last in growth rate output per man hour. Number 1 is Japan; number 2 is West Germany; number 20 is the United States of America.

An article in Newsweek, raising the question, "Can the U. S. compete?" carried this information:

> "The Japanese official was politely regretful. 'Raw materials, yes, he told the New York businessman. We would very much be interested in buying more raw materials, but American manufactured products--well if only the quality were more dependable.'
>
> The British journalist snorted, 'When did you last see a "made in America" sign?"' he said. Refrigerators, washing machines, freezers--the Italians have taken over."

In summing up the position of America, the Newsweek article had this to say:

> "In assessing America's faltering competitive stance in the world, one disturbing conclusion stands out--a prime reason for the U. S. troubles is that all too-many American workers, particularly young ones, who are supposed to be bubbling with energy and ambition, no longer give a damn. Whether they are overworked or underprivileged, pampered or oppressed, dehumanized by the demands of their jobs, or just plain bored, whatever the reason, the evidence is strong that the traditional work ethic of the U. S. is showing signs of senility."

In traveling throughout the country I have asked, "What is it that we produce that we can sell to the rest of the world and which some other country is not making more cheaply and better?" Today only one item has been called to my attention...that is our agricultural produce. The farmers are the most productive in the world and can compete on the world market with farmers in other nations.

The answers to problems do not rest in our machines. We can produce the finest machines in the world. Studies of productivity indicate that the matter of real growth in output per man hour is only 15 percent machines and 85 percent people. The skill, the technological knowledge, educational background, the work habits, the attitudes, all of these other factors make up 85 percent of the growth rate in output per man hour.

This means that people represent the real hidden resource of our nation. In spite of mechanization and technological developments, the person still

represents the major facet in our productivity, particularly as we realize that more than 50 percent of our people are now employed in service occupations, rather than in agriculture or in manufacturing processes. People represent the job of education and the purposes of education must today go beyond the responsibility for teaching the three R's and for teaching the antiquated "four solid subjects" for entrance into college when the teaching of the "four solid subjects" hasn't even proven to be the best way to go to college.

In Ohio we have been attempting to develop a career continuum as a thrust in education to (1) lead youth to a point of career choice; (2) provide at the high school level a means of preparation for work or further education; (3) provide a continuing education program throughout adult life for either technical education, collegiate education, upgrading in their existing work or retraining for new occupations. This continuum starts in kindergarten. In Grades K through 6 we suggest that it be identified as a career motivation program. Within these grades we have two simple goals; (1) to motivate all youth to respect all work; (2) to motivate all youth to want to do something. We do not propose that we ask them if they want to be a doctor, lawyer, merchant, chief, welder, auto mechanic, stenographer or what. Our goal is to encourage them to accept all work as socially significant, economically necessary and the way that they maintain themselves and society.

At the seventh and eighth grade levels, we propose a career orientation program in which then we provide all youth with an opportunity to learn about the professional, technical, skilled,and semi-skilled occupations available in our economy. They are encouraged to consider options open in terms of jobs available, what it takes to reach toward these jobs and

to begin an analysis of what they personally have to offer. At this level we still do not ask, "What do you want to be?" The goal at this level is to broaden their horizons, not narrow their horizons. We ask for two periods a day for two years, utilizing existing teachers in order to assure that all youth will have an opportunity to understand the options that will be open to him.

At Grades 9 and 10 we propose a career exploration program in which we are concerned that every boy and every girl has an opportunity to explore career choices of interest to them. We ask that an average of no less than two periods a day for one year be provided in order to give the young person time to explore either within the school or outside of the school through visitations to and experiences in community units of business, industry, public institutions, private institutions or what-have-you. We do not believe that an adequate program of exploration can be mounted within the four walls of the school. We do not believe that young people can make acequate choices by reading about occupations any more than you can learn to swim by reading about it. We do not deny the importance of occupational information as one input into a career development program, but we do deny that such occupational information stacked from the floor to the ceiling is an adequate delivery system for a career development continuum.

We propose then, at age 16, whether the young person is in the 11th grade or happens to be in the 9th grade, that they have an opportunity to either prepare for employment upon graduation through a vocational program or to prepare adequately for entrance into a professional training program at the collegiate level through a differentiated and reorganized pre-professional curriculum.

We suggest that the vocational program, to be worthy of its place in

in this continuum, must be a broad program into which any boy or girl who wants to enroll can find a place. We propose that the program must sponsor a concept of zero rejects, zero dropouts, and 100 percent placement. It must contain opportunities for the less able to the more able students. It must serve youth and adults. It must be in tune with the needs of the people and the needs of business and industry.

Beyond high school we propose that there be strong professional programs through our colleges, strong technical training programs through our technical institutes and other patterns of organization, and a continuing program for adults throughout their lifetime for upgrading themselves in their present jobs or for retraining themselves for new occupations.

In Ohio during the 1972-73 school year we have 123,000 youth enrolled in the career motivation, orientation and exploration programs in Grades K-10. We provide $20 a head at the elementary school level, not to pay the teachers, but to provide for those teachers the travel, materials and extra services that they need in order to implement the career motivation program. At the seventh and eighth grade levels we provide $25 a head for similar services and $30 at the ninth and tenth grade level.

This year we have 225,000 youth age 16 and above enrolled in high school vocational programs and through such programs we are serving 28 percent of the youth age 16 and over in job training programs. Our minimum goal in Ohio is to be serving no less than 40 percent by September, 1974. Also several of our vocational education centers in Ohio are working to devise new curricula for the pre-professional area on a two-year basis. These curricula are being developed in the broad areas of engineering and science, health, social sciences and business. It is planned that such curricula will take three-fourths of the student's day, leaving one-fourth for the common learning areas of English and social studies.

Within our state we have attempted to broaden vocational programming to include programs which would meet the broader interests of the larger numbers enrolling and the broader opportunities opening in business and industry. At the same time we have attempted to provide special type of programming, recognizing the problems of the dropout-prone youth at the ages of 14 and 15, and the problem of the unable or unwilling student ages 16 to 18, who needs the support of job training in order to motivate them to participate adequately in a vocational education program or any educational program. We recognize the problem of dropout-prone girls in the inner-city section of our major cities at the seventh and eighth grade levels and have initiated an "Impact" program to be of service to them. We recognize that if there are to be solutions to our social and economic problems these solutions must start in the home with improved stimulation of children before the age of 2. Research indicates that the school does not change children---it only improves the product that comes to us from the home.

We understand that the career education thrust is not the only thrust that should be included in education. We can see a place for a cultural thrust, for a citizenship thrust, for a home and family living, consumer and health thrust. We suggest that the career continuum is a basic thrust in the educational program if we are to survive and prosper as individuals, if we are to make our contribution to the society in which we live, and if our nation as a whole is going to maintain a competitive position in the world.

I know of no way in which we can "get more and produce less" unless you mean by "more" more paper money run on printing presses which run faster and faster and which buys less and less. The price of freedom is eternal vigilance and a willingness to work for that freedom. The

competition for freedom through our productive effort may in the long run be just as important as the competition for freedom on the battlefields of the world. Basic to good citizenship is the ability to "pay your way" through work. "Pay-check" education must be an integral and important part of our public education system.

CHAPTER 2 Vocational Education, an Important Program in the Career Continuum

Vocational education cannot be classed as a unique discipline within the educational system of our country. Rather, it can be identified as a program in which we combine the skills and technical content of various disciplines with the practical requirements of the world of work in order to prepare a young person to succeed technically and socially in that world of work. Vocational education, while not unique as a discipline, is unique as a program and this uniqueness is reflected in facilities needed for the instructional program, equipment, instructor qualifications, student goals, and the curriculum provided for the instructional program. Within this listing of unique factors for vocational education, the student goals become paramount and serve as the basis for the development of the curriculum, facilities, and equipment. Also, instructor qualifications grow out of the curriculum plan.

Many of our arguments over curriculum organization, curriculum material development and the amount of emphasis to be placed upon vocational education curriculums within the public education process grow out of differences in understanding or lack of understanding of principles in the learning theory or the educational process. Disagreements over curriculum often start in differences in opinion over:

1. Purpose of Education
2. Learning Theory and Principles of Learning
3. Attitude Towards Present Collegiate Preparatory Curriculum
4. Scope of Curriculum
5. Principles of Curriculum Organization

I would suggest that a person will make a shallow approach to curriculum development unless a study is made of these factors and some principles of education developed. A paper of this type cannot adequately condense the many volumes that have been written on each of these topics but I would propose to make a brief summary of the importance of each of these factors.

Purpose of Education

The overall purpose of education in any society might be stated: "To prepare people to adjust to and improve the society in which it exists." The educational process, therefore, is constantly affected by the society in which it exists and by the social and economic factors prevailing in that society. Early efforts in education, therefore, emphasized the importance of literacy and citizenship training, since a democratic society depends upon a literate, informed and concerned citizenry. As our society grew more affluent, more complex, free public education was extended upwards into the high school years. At the time the early high schools were organized, the large majority of the youth attending high school did so as a preparation for attending college. Job skills other than the professions were learned through a pass-on procedure of father to son, through a process of apprenticeship indenture or through the pickup process, since much of the work involved unskilled process needing only strong backs.

Since the major goal of the early high schools tended to be that of preparation for college, it was natural that the curriculum in our

high schools was organized around the subject-centered basis that one would find in the normal college or university. The high schools gradually established a Carnegie unit of organization which would allow the colleges and unviersities to identify those students who had completed the course of studies each college assumed was the best one to prepare for further education at the collegiate level.

While every set of objectives, including the "seven cardinal principles of education," "the ten imperative needs of youth" or "the developmental needs of youth" as identified by Havighurst all established the importance of preparing youth for employment who are not going on to college, the high school curriculum of yesterday and today, however, has essentially remained a subject-centered college preparatory curriculum. Our present high school curriculum is oriented to the college preparatory purposes with a smattering of liberal arts, co-curricular activities and cultural subjects serving as the basis for calling a school a "comprehensive high school."

The obscurity of the organization of the present curriculum and the fact that the most intelligent students have tended to do well in the college preparatory curriculum has grossly misled our people into assuming:

1. That the subject-centered curriculum was the best way to prepare for college.

2. That liberal arts which tend to contribute to enjoyment of living takes precedence over preparation for employment.

3. That most of the youth participating in our public education system, including the large number that drop out from the system, can continue to get training for work through the pickup method, ignoring the technological nature of our society, the economic organization of that society and the social changes taking place.

It is my thesis that:

1. The price of our technological age is pre-employment training

for the majority of youth who wish to enter employment in business and industry.

2. Curriculums planned for pre-employment training can also make a major contribution to the development of good work habits and attitudes and the education of youth as a participating citizen in our form of government.

3. Curriculum planned at the high school level cannot assume the role of education for a lifetime.

4. While both cultural subjects and occupational training are worthy services of educational programs, our economic society and the opportunity to participate in the cultural values offered are dependent upon employment in that society.

The heavy unemployment among unskilled youth in the ages of 16 to 24, particularly in the ghetto areas of our major cities, and the growth of numbers on our welfare roles even in this period of high unemployment would suggest that unemployment creates poverty and that people in poverty do not participate economically or culturally in our society. In an article in The Wall Street Journal, Harley J. Lutz, Professor Emeritus of public finance at Princeton University, said:

> "Poverty is essentially a problem of distribution of wealth. It has three significant aspects, and for each there is a specific remedy.
>
> "The three aspects are: An excessive number of people need employment; the skills needed for remunerative employment are lacking, and capital to provide the needed jobs is insufficient. The obvious corresponding remedies are population control, better training facilities and more capital investment . . . .
>
> "Better training for the new skills, New materials, processes, and machines have been developed at an amazing rate, but educators have not revised and adjusted the educational process to conform with these changes. In consequence, too many people have been unable to acquire the skills called for by the new industrial age.
>
> "The failure of educators to keep pace with the changing economic and social environment may be laid, in large part, to fundamental differences of theory regarding the purposes of education. These purposes are training in some sort of craft, occupation or profession in which the individual can earn an income sufficient to provide a comfortable living for himself

> and his family, and orientation in the culture of his society that will give his life greater fullness and meaning. Both are important and neither can be adequately achieved by the time the individual arrives at maturity. However, whatever is to be done by schooling with respect to the first objective, so far as a large proportion of each new generation is concerned, must occur within the first 20 years or so of the life span. To this extent it should have priority. The individual's cultural development is not limited in time or extent to the knowledge and understanding acquired in college, although many assume that the bachelor's degree is a certificate of a complete education."

I would suggest, therefore, that vocational education is a very worthy purpose in the educational program today and that it should become a primary purpose of education at the secondary level in order to enable young people to enter, to adjust to and to improve a technological society.

Learning Theory and Principles of Learning

Early practitioners and theoreticians in the area of education, such as Pestalozzi, Rousseau and Froebel had no need to concern themselves with preparation of youth for employment since the youth were prepared for employment in a father-son relationship. They found, however, that education separated from the life experience of the youth was not effective. Without understanding the psychological principles behind learning, they found that they had to relate the teaching in school to the work life of youth. So we find that early in the history of formal education, proposals of the educational process should involve a half-day in school and a half-day at work with relationships to be drawn between the two experiences.

Psychological studies confirmed the experiences and observations of the early theoreticians in education. Through the psychological studies, principles of learning were developed which could serve as guides for instructional methods and curriculum organization. Gerald

Leighbody, in his book "Teaching Industrial Subjects," summarized the principles of learning as follows:

1. We learn best when we are ready to learn. When we have a strong purpose, a well-fixed reason for learning something, it is easier to receive the instruction and to make progress in learning.

2. The more often we use what we have learned the better we can perform or understand it.

3. If the things we have learned are useful and beneficial to us, so that we are satisfied with what we have accomplished. the better we retain what we have learned.

4. Learning something new is made easier if the learning can be built upon something we already know. It is best to start with simple steps which are related to things we can now do or which we already understand, and proceed to new and more difficult tasks or ideas.

5. Learning takes place by doing. Before the learning can become complete, we must put into practice what we are attempting to learn.

These psychological principles of learning were not developed for vocational education or by vocational education, but even a cursory review of these principles will show the massive possibilities present in vocational education programs to utilize these principles in both curriculum organization and teaching methods. John Dewey, a modern theoretician in education, put together the experiences of the early theoreticians, and the principles of learning developed by the psychology studies and made popular the phrase "Learning by Doing."

Prosser's sixteen theorems for vocational education, so well known to the people within the field of vocational education and so applicable today as they were at the time they were written, put into language for vocational educators the proven principles of learning and the educational theories so well expressed for the total educational program by John Dewey.

All experience in education, all the results of scientific studies have indicated that to be effective education must be experience-centered. A sound curriculum, therefore, must have experience as its center if it is to be effective in the education of youth and adults. Vocational education requires an experience-centered curriculum.

Discussions with most high school principals will indicate that they believe that most of their graduates go on to college. In the state of Ohio, however, the facts show that for every one hundred students starting the first grade, seventy-nine will graduate from high school, thirty-two will start to college and fourteen will finish college.

Our curriculum in our public schools, therefore, tends to point itself towards the needs of the majority of the students. If research showed that it was necessary for a young person to make a choice between a college preparatory program which prepared him for a success in college and a vocational program which prevented him from attending college, perhaps most educators would take the view that we must make sure that all young people have the opportunity to prepare for college. Fortunately, however, research has indicated that it isn't necessary to make this kind of choice even when the student invests himself in a depth program of vocational education involving three-fourths of his day during the last two years in high school.

In Ohio, all graduates of vocational education programs are eligible to attend state universities. If universities would believe thirty years of research, those who can think, write and read better than the average student--all could be entered into universities of their choice. The Carnegie unit approach to curriculum organization imposed upon the public schools by our universities has absolutely no basis in research. Thirty years of research dealing with success in college has proven that

success in college correlates more clearly, more directly, with how well a student did in whatever he took in high school than it did with any certain set of subjects.

To report just the findings of two such studies, David Cook, in his study on "Predicting Success in College" at the University of Indiana, summarized his findings in these words:

> "It did not make a great deal of difference whether a student took a college preparatory course (with more mathematics, language and science) or a non-college preparatory course so far as grades earned in college were concerned...
>
> "Advanced study of languages in high school had no relationship to grades earned in foreign language in college."

Paul B. Diederich, in an article "The Abolition of Subject Requirements for Admission to College," made this statement:

> "The only requirement for entrance to the University of Chicago is 'that students be able to read, write and think a great deal better than most students are now able to do.'
>
> "Simple tests of these three abilities have a higher correlation with marks in all courses than any other major has ever devised.
>
> "Our system of public secondary schools, therefore, is in the grip of a standard curriculum which is based on the fundamental premise that the pursuit of certain prescribed studies is essential to success in college. It has been proved as completely as anything in life is ever proved that this premise is false."

I would submit to you that our present high school curriculum is bankrupt. It is subject-centered in opposition to all that we know about the learning process. It worships at the altar of math and science as gods rather than as tool subjects. It assumes that the Carnegie unit requirements for entrance into college has a basis in fact for success in college and this assumption has been thoroughly disproven. It accepts an 1850 concept of a curriculum organization pointed towards preparation for the professions as the basic curriculum

for all youth. The curriculum in the majority of our high schools is not relevant to either the needs of youth or the needs of our modern society and must face a massive change.

Curriculum organization for vocational education must avoid the same practices and problems which have made the present high school curriculum bankrupt and must not allow itself to be restricted because it might interfere with the real high school educational program, "the college preparatory curriculum."

Scope of Curriculum

In the early 1940's the term "progressive education" became a popular term in education, but then fell into disrepute as a progressive education movement became mistakenly aligned in the minds of people with the few in the movement who thought progressive education was related to the question of, "What do you want to do today, kids?" The progressive education concept, however, envisioned a concern for the whole student and not only a responsibility for teaching him subject matter and skills. A concern for the whole student would indicate a concern not only for his exhibited educational progress in the classroom or laboratory, but also for the social, economic, physical and mental health conditions that had a bearing on his participation in the educational program.

While educators for years have given lip service to this concept of concern for the whole student, education has not had either the understanding, the financing, or the staffing to do more than give lip service to this concept. I am suggesting that the educational curriculum cannot be separated from the supportive services involving enrichment or remedial education, social services, economic support,

and physical and mental health services. Our experiences in the job corps centers and in the programs operated within the states under Manpower Development and Training would suggest that schools that ignore the importance of these supportive services are encouraging high dropout rates of youth, particularly those from the low socioeconomic families. Experiences today would also suggest that the cost of welfare is such that it would pay society to make sure that an investment is made in every young person to enable them to enter and participate in our society as tax producers rather than tax consumers.

Investment in education and supportive services are perhaps the only solutions to our social and economic problems of our day. Funds invested in these are truly an investment, not a cost. If this concept were to be accepted with the schools, it would affect all facets of the educational program, including facilities, equipment, staffing, student participation and curriculum organization. Most approaches to curriculum organization have not given attention or consideration to the integration of support services as a part of the curriculum.

Scope in curriculum for vocational education must also recognize the interests and abilities of the youth and adults who are to be served by vocational education. The Vocational Education Amendments of 1968 indicate that any youth or adult who wants and needs vocational education should have the opportunity for a program of high quality. The varied interests and abilities of the persons to be served and the broad opportunities in the labor market point toward the importance of a broad student base and tax base to provide for an adequate scope of program. The mobility of the population and the movement of persons from the rural to the urban emphasize the importance of the goals of the Vocational Education Amendments of 1968.

CHAPTER 3 Blocks to the Development of an Adequate Program of Vocational Education

The first two chapters of this report provide some concept of the importance of the development of a broad program of vocational education within our public schools, as an important part of the development of a total career continuum. Unless school planners, legislative service units, legislators, governors or any other study groups have an understanding of the importance of vocational education to both the individual, the society and the economy they will not be willing to make the kinds of investments necessary or to make the total impact upon the educational system and the public essential to build the type of program that can make effective contributions to the social and economic problems of our nation. Any efforts to achieve a broad expansion of vocational and technical education must recognize several blocks to the achievement of that goal.

The Attitudinal Block

Generations of students in elementary schools have been told by the teacher, "If you don't study hard, you won't be able to go to college and you will have to work for a living," and this has had a cumulative guidance effect on the total population. Added to this the fact that our secondary educational system has been pointed almost entirely to preparing youth for college. The entire population has been taught that if you do not go to college you just do not count and the only work socially acceptable is that in the professions requiring a baccalaureate or graduate degree. I am not stating this problem too bluntly or too harshly. It is simply a fact that our American educational system has educated a total populace to worship at the altar of the collegiate degree. The collegiate degree has been the symbol of social acceptance and economic achievement. The fact

that for Ohio the 1960 census indicated that only 7.2 percent of our population above the age of 21 had a bachelor's degree or better seemed to be a fact unknown to both our population at large and our educational system in particular. In making studies throughout the country I have seldom found a principal of a high school who did not indicate that over half of his graduates, and in many cases up to 90 percent, went on to college. I have never encountered a high school principal who knew how many of his graduates were in college the second or third year.

The attitudinal block is compounded by top management personnel who tell educators what they want to hear, "Just give us the well-rounded individual and we will do the rest." They fail to communicate this concept, however, to the personnel people who consistently ask those who enter their gates the simple question, "What can you do?" The people who do the employing have no way to measure the well-rounded individual. They have no methodology for measuring attitudes--they have jobs to fill which require skills and technical knowledge and their search is for those persons who can provide them with the skills and technical knowledge. It is true that many people lose their positions because they are unable to adjust to their fellow workers or to their employers. We lose sight of the fact that they wouldn't have had the job in the first place if they didn't have the skills and knowledge to hold that job.

The attitudes of minorites also indicate a lack of respect for work. Members of minority groups who have been eliminated from both the skill level and the professional level positions for many years now seek to attain the goal of highest social acceptance--that of the professional degree--and encourage almost all of their youth to aspire toward such degrees. The blunt fact is that out of every 100 young people starting the first grade in Ohio, only about 14 out of the 100, including both

majority and minority persons, will achieve a professional degree. The attitudes of all groups have encouraged the individual to ignore the importance of work, ignore the benefits of those working in skilled occupations, ignore the essential fact that 86 people out of every 100 will earn their living in occupations not requiring a bachelor's degree.

The educators' attitude often has been conditioned by the parents of the elite group in the community who are the most vocal in school matters. The leadership in the elite group impacts upon the school administration and demand consistently, "Will my child be able to get into college?" The educator also has been conditioned by the fact that after graduating from public school he went on to college, graduated from college and then returned to the educational system to prepare more people to go the same educational route.

There is an attitudinal block with regard to the preparation of people for work. The attitudinal block has been changing as we find persons in skilled work--and I use this in terms of business and distribution as well as in an industrial context--able to earn significant salaries and to participate in a fair share of the goods and services within our economy. We have begun to suffer from a lack of highly intelligent persons working in these occupations who can become creative in a practical sense through a depth of knowledge growing out of experience in work. The attitudinal block is real, but it has been changing. The platform efforts of important educators, such as those made by Dr. Sidney Marland, and political personages, such as former Governor James Rhodes, of Ohio, have helped to make people comfortable with the facts that they must face.

The Organizational Block

The organizational block is no less real than the attitudinal block. As indicated in the previous chapters, a significant scope of vocational

education in terms of the interests and abilities of persons enrolled and the job opportunities available to them, is dependent upon the availability of a broad student base and a broad tax base. The broad student base is necessary in order to get program diversity. The larger the number of persons involved in vocational education programs, the more different interests and abilities, and industrial or community needs can be met. A broad tax base is essential, because even if you have a large number of persons needing training, there must be a tax base such that the cost does not become too high in terms of the taxpayers who must bear the burden. In almost all vocational planning districts with which I am familiar, the industries and businesses will end up paying most of the taxation costs, but the decisions are made by the individual taxpayers.

Within the state of Ohio at the time we began our major planning effort, there were over 630 school districts, ranging from those with high schools enrolling less than 100 to cities the size of Cleveland, with large numbers of high schools, many enrolling 3,000. There was no way within the state of Ohio to provide an adequate program of vocational education to all youth and adults within that state on the basis of the then existing school district organization. It was impossible to bring about the necessary student base or tax base within that type of district organization to provide a defensible scope of program. While the number of school districts within my state and within many states have continued to reduce over the many years, the process of consolidation has been too slow a process in order to bring about the necessary student base and tax base for the development of an adequate program of vocational education.

The school district organization base, therefore, can be one of the major blocks to the development of an adequate program of vocational education.

The Fiscal Block

There is no question but what vocational education programming for youth costs more than continuing the very limited college preparatory or general program available at the high school level to most youth in the nation. Most states have laws establishing minimum requirements for graduation from high school. These minimum requirements relate to history, the social sciences, math, physical and biological sciences, English and physical education. In order to meet the minimum standards for high school graduation as set by most state requirements, it is not necessary to offer vocational education programming for youth. The cheapest form of education, therefore, is to offer the fewest number of offerings with the highest enrollments in classes. Dr. Sidney Marland, however, has denounced the general curriculum which enrolls the majority of our youth as unworthy of an educational system in a modern age.

Educational systems, however, particularly those with fiscal problems--and it is difficult to find a school district that does not have fiscal problems today--is reluctant to expand a curriculum into the costly areas of vocational education without specific financial encouragement to do so. Even school leaders who understand the advisability of such educational programming face difficult decisions when their efforts in expanding programming cuts into the salaries of existing staff personnel. Since vocational education is not a required part of most state department requirements for approval of a high school charter, or for graduation from high school, categorical aid is essential in order to assure the flow of investment dollars into the development of such programs. Categorical aid is needed for construction, equipment and operation. The flow of more dollars in the school systems on a non-categorical aid basis will only encourage that system to reduce either local investments or to improve the

salary structures for teachers, many of which are too low in relationship to the professional services of the teachers.

Vocational education programs in our state and in the nation have been developed only on the basis of categorical aid allotted from the federal level and the state level. We have run cost analysis studies in Ohio and find that the excess cost of vocational education as compared with any other laboratory subject rests in the cost of equipment and extended service required by the educational program in certain of the vocational types of offerings. The greater meaning of the term "vocational education costs more" really relates to the fact that any investment in education beyond the required courses for graduation becomes a cost that an educational system does not have to assume and can hardly assume without additional fiscal assistance.

The three blocks, the attitudinal block, the organizational block and the fiscal block are very real blocks in terms of the development of both a career continuum in general or a vocational education program in particular. They are identified here because there is no simple answer. The commitment to planning and implementation of the plans in terms of bringing about an adequate program of vocational education for all youth and adults must plan an attack on all three of the blocks, not just one. Money alone isn't the answer, but there is no answer that does not involve increased funding.

CHAPTER 4 Legislative Action Stimulating Planning for an Expansion of Vocational Education Programs in Ohio

It became obvious to the leadership of vocational education in Ohio in the late fifties that while Ohio faced the attitudinal block, the organizational block and the fiscal block, the organizational block was the most formidable in terms of the growth of adequate vocational education

services outside of the major cities. Within most of our major cities there were vocational schools, offering high quality trade and industrial, business and distributive programs to a limited number of people. Outside of our major cities the massive number of districts offering any vocational education offered vocational agriculture and home economics. Sensing that consolidation was going to move too slowly to bring about school district organization of sufficient size to provide the student and tax base necessary for an adequate program of vocational education, efforts were centered initially in the late 50's on the development of a law which would permit a number of school districts to join together into a joint vocational school district for the purpose of levying taxes for the construction and operation of an area vocational education center to serve the participating districts. The feasibility of this concept was first demonstrated in a small county which had a surplus building available and a dollar windfall from state allocations due to a shrinking enrollment.

Given the limited success of several districts voluntarily sending students to an area vocational education center, the state legislature was approached by the Division of Vocational Education with the concept of writing a law permitting districts to form such an organization and allocating taxing powers to such an organization. The first joint vocational school district law was passed in Ohio in 1959. The law did not prove to be workable in that it permitted districts to withdraw after the joint district was formed. The law was improved in 1961, but still proved to be unworkable. The law establishing joint vocational school districts was amended again in 1963 and made such districts legal and feasible. This law, however, was voluntary in nature, permitting districts to go together to establish the legal base for the funding and operation of such districts. It did require planning or patterning of

the state for such districts. Essentially the educational leadership in the State Department of Education of that day did not believe that school districts would join together voluntarily for the purpose of establishing joint vocational school districts and then go through the process of voting money over the joined districts for the construction, equipment and operation of area vocational education centers. A copy of the major features of the joint vocational school district law is attached as Appendix A.

There are a number of important elements within the joint vocational school district law, but I will review only several of them briefly here. One of the important determinations was the selection, powers and operation of the boards governing the joint vocational school district. It was decided that the districts would be governed by a board of education, but that the board of education would be made up of representatives appointed from city, exempted village and county districts participating in the jointure. Within the state of Ohio we have city, exempted village, county and local boards of education. The local boards of education, while administering and setting policy for local school districts, also receive services from and certain policies from a county board of education, covering two or more local school districts. A determination was made to have representation from the county boards, rather than from all of the local boards. The county board members are elected from the districts covered by local boards of education and thereby are representative of the territory and people covered by local boards of education. This pattern for the joint vocational school district board of education not only gave representation to all people, but limited the number of persons participating on the joint vocational school district board of education.

In some cases twenty-five school districts have joined together to

form a joint vocational school district and it was estimated that when a number of school districts went together a massive board of twenty-five would not be desirable. As indicated above, the membership of these boards were appointed by their individual boards, rather than elected at large over the area. We believe this one move in terms of the controlling board of the jointure was perhaps one of the wisest decisions made in that this type of board maintains a liaison relationship with all of the participating districts. Such an organizational plan prevents the joint vocational school district from becoming a separate entity in itself and from engaging in conflict with the participating school districts.

As indicated in the law, students remain members of the home school in terms of credits, extra-curricular activities and graduation. In most cases the students attend the vocational education centers all day in terms of receiving a full vocational program and their required academic subjects. Graduating from their home schools, they receive a first-grade high school diploma and are eligible to go on to college should they change their goal from the vocational area in which they were enrolled.

The joint vocational school district boards of education have the rights and powers of a city board of education and have the powers to submit bond issues and operating levies to the populace covered by the jointure, employ all personnel and serve all other functions of any similar board of education.

The final amendments to the joint vocational school law in 1963, making the joint vocational school district law effective, came at an opportune time. The Vocational Education Amendments of 1963 provided some funds to assist with the construction and equipping of vocational education facilities. This joint vocational school district law was a voluntary act, not requiring districts to go together. Through the leadership of the

Division of Vocational Education, we began working with school districts throughout the state of Ohio to sell the concept that cooperative efforts among the school districts could bring about the development of a student base and tax base which would make possible the establishment of a broad vocational education program for youth and adults.

In spite of the estimate by some vocational leaders that no districts would ever go together, we found leadership throughout the state in superintendents of schools, and particularly in county superintendents of schools, who saw this as a means of providing for an expanded vocational service for youth and adults. It certainly was not to their fiscal advantage to work with the organization of such districts. It was not to their personal advantage, because it took time and significant effort and considerable personal leadership. It is to the credit of the educational leaders in our school districts in Ohio that the concept of joining together for vocational education purposes was even given a fair trial.

Credit is also due to the Division of Vocational Education, which accepted the challenge made possible by the passage of the J.V.S. law, and the opportunity made available under the Vocational Education Act of 1963, to work with school districts on area surveys involving the schools, industry and business to determine the feasibility of establishing an area vocational education center. The staff of the Division of Vocational Education worked long and hard, assisting many areas with community surveys involving the community in arriving at a base for decisions. Joint vocational school district organizations began to spring up in several sections of the state, but the area around Rossford, Ohio, which included parts of five counties and involving twenty-five districts, which organized into the Penta County Joint Vocational School District and four local school districts,in Lake County which organized into the Lake County

Joint Vocational School District were the first ones to organize and to pass their local levies necessary to establish joint vocational school district programs and facilities. The Vocational Education Act of 1963 enabled this to be a reality, providing monies which could be used to match locally voted dollars on a 50-50 basis for construction and equipment. State Foundation monies used as matching for federal funds also were used to assist with the cost of operation of programs established.

The first joint vocational schools opened in 1965. They were successful from the beginning of their operation, enrolling initially sufficient students to warrant the programs established and growing from that point to full enrollment and to additions to their existing facilities. Penta County was built initially for 1,200 students and Lake County for approximately 600 students. It was our judgment that Lake County would offer a minimum defensible program with 600 students and Penta County could offer a desirable program on the basis of 25 different families of occupations as a basis for student choice. The facilities were and continue to be used for both high school youth and adults, including supplementary courses for employed workers, and the facility at Penta County Joint Vocational School became the site of one of the early technical education developments when technical education was under the supervision and leadership of our Division of Vocational Education. This fall there will be 25 joint vocational school districts in operation, 14 additional ones funded and in the process of planning or construction, and 19 more to vote local funds.

There is no question but that the joint vocational school district law provided a permissive approach to overcoming the organizational block that we faced. There is also no question that this Act, overcoming the organizational block, would not have had any significant effect if the Vocational Education Act of 1963 had not also provided some funds to

assist with overcoming the fiscal block in terms of the construction and equipping of the vocational education facilities.

In 1965 the then governor of the state of Ohio, James A. Rhodes, became interested in vocational education as a part of his economic development effort. He found industry and business concerned about the training of their workers as they talked about either expanding their facilities in the state of Ohio or bringing new facilities into the state, An interest in vocational education, based upon a study of our efforts by his finance director, Howard Collier, provided a person on a public platform level who could begin to speak to the concept of the attitudinal block facing such program developments within the state. Many of his public statements and positions are made clear in his book, Alternative to a Decadent Society, published by Howard W. Sams & Co., Inc., Indianapolis, Indiana. This former governor of Ohio, James Rhodes, has continued to champion the cause of vocational education beyond the end of his administration and he now serves as chairman of our National Advisory Council for Vocational Education. The study of vocational education on part of the state administration and the decision of the state administration to expand the role of vocational education within our public schools led to the initiation of legislative efforts to improve not only the fiscal funding for vocational education, but also the laws which would encourage further consideration of vocational education within our public education effort.

In 1965 the office of the governor encouraged an amendment and the legislature passed a law which stated that no boy or girl should be allowed to drop out of high school who had not completed a vocational education program. The amendment to the law, however, left to the State Board of Education the determination of what was vocational education.

This was a logical step, as there is an elected state board of education within the state of Ohio. The State Board of Education at that time, however, was not urged by Dr. E. E. Holt, the Superintendent of Public Instruction, to establish a meaningful definition of vocational education. The determination of what was meant by vocational education in the law was left to the interpretation of each school district and if a school district decided that a general science course at the 9th grade was preparation for work, then that was accepted as the vocational education program which would meet the law. Obviously, this was not the intent of the framers of the law and the law stayed on the books, without any significant effect in terms of the school population.

In 1969 the office of the governor through the State Finance Director, again encouraged the legislature to amend the School District Foundation law to require the development of a statewide plan in order to make an adequate program of vocational education available to all the youth. This amendment to the State Foundation law, included as Appendix B, still left to the State Board the determination of what was an adequate program of vocational education. This amendment, however, set requirements for a plan which stated a date for all districts in Ohio to submit a plan to the State Board of Education and a date for the State Board of Education to arrive at a plan covering the entire state. The most significant feature of the law, however, was the section which required that no district with less than 1,500 in the upper four grades could plan alone. Districts could decide to arrive at an adequate program of vocational education through: their individual district if they had above 1,500 enrolled in the upper four grades; through consolidation of several districts to achieve the size; through contracts between several districts to share the cost of programming; or through the establishment of joint vocational school districts.

This was truly landmark legislation--a legislature saying that all districts in Ohio should provide for an adequate program of vocational education and setting a minimum requirement to attempt to bring about the student base and tax base necessary to achieve this goal. The initial legislation proposed had set a minimum of 2,500 in the upper four grades for planning purposes. It was the judgment of our Division of Vocational Education that to achieve a minimum program economically there needed to be approximately 3,000 students in the upper four grades to provide sufficient students age 16 and above to justify at least a minimum vocational program. A special interest was able to make the change in the last night of the legislative session to reduce the 2,500 to 1,500 student minimum for planning.

This legislation required bold action on the part of the state legislature, significant planning on the part of the office of the governor, but the implementation was still up to the State Board of Education. While some of the leaders in education saw the need for an expanded program of vocational education, a larger number of superintendents would see any effort to enforce the law as an infringement upon their domain of control.

CHAPTER 5 A State Board of Education Role in Developing Standards to Implement State Legislation

As indicated in the previous chapter, the state legislature had passed landmark legislation in 1969 requiring the development of an adequate program of vocational education for all youth in the state of Ohio. The legislation, however, did not define the word "adequate." As in the 1966 law described earlier, the state legislature left to the

elected State Board of Education the responsibility of defining what was an adequate program of vocational education. This new law, however, called for a broad planning effort, which would result in the establishment of a statewide plan by the State Board of Education in which no district was left out. As the state legislature gave consideration to the passage of the law, the State Department of Finance had required our Division of Vocational Education to develop an ideal plan for vocational education districts for the state of Ohio and an identification of costs for implementing such a plan. The basis used for this ideal plan, however, had not been established by or accepted by the State Board of Education. An initial ideal plan indicated that the state could be served by the organization of 56 vocational education planning districts.

After the passage of the law requiring a state plan for vocational education districts, several months elapsed without a request to our Division of Vocational Education for a planning process to implement the law. The Division proceeded, however, to develop a proposed set of standards to define an adequate vocational program and to suggest procedures and guidelines for a pattern of organizing the state into vocational education planning districts. The proposed sets of standards was a bold approach to accepting the challenge of the legislation and the State Superintendent of Public Instruction, Dr. Martin Essex, gave full consideration to the proposal made by the Division of Vocational Education. The proposed standards included: a recommended percentage in terms of the minimum numbers of students 16 years of age and above that should be served by a job training vocational education program; the minimum number of vocational education programs that could be considered adequate in terms of a scope of vocational education offerings; a pattern for bringing the school districts together in order that they could consider their organizational approach to submitting

guidelines for the priority in funding construction that would give priority to districts including a minimum number of 3,000 students in the upper four grades in the planning unit doubling the 1,500 student minimum for planning in the legislation.

Accepting the proposals of the Division of Vocational Education as a basis for discussion and study, the State Superintendent required that the proposed standards be carried to district meetings in all parts of the state in order for administrators, teachers and other interested persons to discuss the proposed minimum standards and to indicate clearly their concerns and interests relating to those standards. You can understand that there would be a great hue and cry in a state in which many superintendents felt loath to join other superintendents in any pattern which might impinge on what they considered their domain of control and influence. It is true that some of the districts in the state had already organized into joint vocational school districts voluntarily and the success of these districts gave credence to the value of the planning effort proposed in the state legislation and proposed state standards.

These area meetings with superintendents resulted in much heat and broad discussions, but brought about relatively few changes in the proposed standards. The major change which was injected into the proposed standards was a sliding scale with regards to the percentage of the students for which vocational education must be provided, based upon the percentage of students going on to college from that school district. Controversy still reigned supreme throughout the state regarding the proposed plan and a number of dissident superintendents encouraged the State Superintendent to establish an additional

superintendents' review committee at the state level made up of superintendents selected from all parts of the state of Ohio. This committee served faithfully and examined the proposed standards very carefully, making only minor suggestions for change.

The proposed standards were presented for consideration to the State Board of Education on the 12th of January, 1970 with a large number of persons in attendance at the meeting. Approximately 500 persons attended the meeting and the Board held hearings from about 3:00 in the afternoon until about 9:00 that evening. Strong statements were made regarding the standards by both individuals and organizations. Following the hearings the State Board of Education proceeded to vote on each standard proposed. There was not a unanimous vote on any of the standards, but voting was clearly in support of the standards by about a 12-7 majority. A copy of the standards approved by the State Board is included as Appendix C. Major provisions of the standards are as follows:

1. Each planning district must provide vocational education facilities for a minimum of forty percent of the eligible students except for those districts which had a proven high percent of students going on to college.

2. A minimum vocational program would be considered 12 different vocational educational offerings providing 20 classes of vocational education under the state foundation program.

3. All programs to be included within the minimum number of vocational programs would be required to meet the standards for vocational education established by the State Board of Education.

4. No plan would be accepted from a district or combination of districts with less than 1,500 in the upper four years of school, but the priority for funding of construction would be given to those districts which had 3,000 students or more in the upper four years.

5. The content of the plans to be submitted by the districts were identified, including the necessary physical facilities and costs and taxes necessary to build, equip and operate the program submitted in the plan.

6. A requirement that districts which elected to contract with other districts would be required to establish a contractual relationship and to pay for no less than 20 percent of their eligible students to be in attendance at the district offering the vocational education programs.

   This important provision prevented the establishment of paper contracting relationships, in which everybody agreed to do nothing. The contract provision made it necessary that districts plan honestly, since they would need to contract and pay for 20 percent of their eligible students to the district that would be offering the vocational education services.

7. The standards required the districts to meet initially in accordance with the ideal plan of 56 vocational planning districts developed by the State Division of Vocational Education and identified the procedures for bringing together the representatives from the districts in each of the proposed planning areas.

   The districts were not required to stay in such a planning group, but to meet together as a means of initiating action.

Other sections of the standards referred to implementation of the sections of the law as passed by the general assembly, restrictions on the allocation of construction funds until plans were approved by the State Board, and provisions for the consideration of any creative or exemplary developed plans proposed to the State Board.

As indicated above, the standards were adopted by the State Board on the 12th of January, 1970 and the initial plans were due from the districts throughout the state by April 1, 1970. With the approval of the standards by the State Board of Education, the hue and cry throughout the state ceased and the districts went to work to meet the provisions of the standards and the intent of the law established by the general assembly.

CHAPTER 6 Implementation of the Planning Procedures Established by State Law

As indicated in the preceding chapter, the initial meetings of school districts was by the ideal state plan, dividing the 638 districts into 56 vocational planning districts. The immediate response coming out of the planning meetings established following the procedures approved by the State Board of Education was a bit of an amazed reaction that they could, after all, meet together, discuss planning concepts and reorganize themselves into planning districts in accordance with their interests and State Board standards. It was, and continues to be, the judgment of the Division of Vocational Education in the State Department of Education, that the 1,500 minimum student enrollment in the upper four grades for a planning district was too small to achieve economically and efficiently, even the minimum of 12 different programs and 20 classes established by the State Board of Education, much less the desirable program of 25 to 30 different programs and approximately 50 units. The amazing result was a much more positive effort on the part of the superintendents of schools to achieve not only the letter, but the spirit of the law and standards, as they began to prepare their plans to the State Board of Education on April 1. This was the first law in Ohio requiring inter-district planning on a formalized basis which would result in the submission of such plans to the State Board of Education.

Within the Department of Education, the State Superintendent of Public Instruction established a review committee, made up of assistant superintendents of the State Department, to review the proposals developed by the local schools and submitted through the Division of Vocational Education in the State Department. The Division of Vocational Education also assigned a full-time person, D. R. Purkey, to work with the planning

groups throughout the state in order to provide technical help and advice and counsel with the development of their plans. Much of the success of the planning effort can be credited to the sincere efforts of the superintendents of schools within the state and the maximum effort made by the representative of the Division of Vocational Education to be of service to these planning areas. The State Director of Vocational Education and other members of the Division of Vocational Education also participated in working with these planning units to complete their plans by the deadline.

Plans submitted by the districts throughout the state were first reviewed for completeness and conformity to the state standards by the Division of Vocational Education. The proposed plans were then reviewed by the Department review committee established by the State Superintendent of Public Instruction. Upon completion of the review procedures, the plans were then submitted to the State Board of Education for approval. All but three of the planning districts achieved the goal of submission of plans by April 1, 1970. Much give and take was necessary in order to organize the submitted plans into a statewide plan in order that the State Board of Education could complete its approval of a total plan by July 1, 1970. A format had been provided to the units planning throughout the state which enabled them to submit their information in a compact manner on standardized forms. A copy of these planning forms are included as Appendix D.

The policies of the State Board of Education also permitted the revision of these plans by submission of proposed changes to the State Board. It has been the policy, however, that no plan can be revised without all districts listed in the initial plan being included in another legal pattern of organization. Plans have been, and continue

Education. The goal is the development of adequate programs of vocational education to serve all youth in the state. Planning, however, means little unless monies can be obtained through local taxation, and state and federal matching monies. When a vocational education planning district finds that it has been unable to convince the electorate of the need for funds for the construction and operation of vocational education facilities they often try to find a different pattern of relationships, either within their own planning district, or in cooperation with other planning districts in order to achieve the approval of the electorate.

At the time the initial statewide plan was approved by the State Board of Education, the State Division of Vocational Education indicated a need for a total construction investment of $427,820,488.00. over a period of approximately six years in order to provide the additional facilities and equipment necessary to achieve the forty percent minimum enrollment of eligible youth in vocational education. The proposed cost was based on $22.00 per square foot for construction. Projected costs in terms of increased operating funds also was identified in terms of the then existing State Foundation funding pattern for vocational education under the State Foundation program.

The planning effort initiated by the standards established by the State Board had a very positive effect on the development of improved plans for vocational education throughout the state. Massive efforts were made by the planning districts to implement the plans. The number of levies and bond issues submitted to the electorate to provide for implementation of the plans increased and a new wave of enthusiasm for expanding vocational education in Ohio was encouraged by the then governor of the state of Ohio.

CHAPTER 7 Funding Vocational Education

Perhaps all of the laws, standards, and planning efforts referred to in previous chapters would have been in vain if the legislature and state administration had not decided to place dollars with their requirements in law. The 1967 session of the state legislature moved to place a bond issue before the public and included construction for vocational education as a part of that bond issue. Initial planning for construction funds for vocational education was on the level of $35,000,000. After the passage of the bond issue, the finance committees in the House and Senate in 1969, with the encouragement of the state administration, increased the allocation for vocational education construction from $35,000,000 to $75,000,000. You should recall that the initial funds for assisting with the construction of vocational education facilities were federal funds allocated under the Vocational Education Act of 1963. These funds had made possible the initiation of the first joint vocational schools in that construction funds voted locally were matched by federal vocational education funds for both building and equipment. The availability of the federal vocational matching funds had stimulated local efforts and the availability of $75,000,000 following the action of the general assembly in 1969 gave a great stimulation to the expansion of vocational education facilities in all types of vocational education districts, including the joint vocational school districts.

By the time the state legislature met in 1971, all but $6,000,000 of the funds allocated under the previous bond issue had been committed for the construction of vocational education facilities in all of the

types of districts in the state. The initial organizational pattern for vocational education planning districts in Ohio indicated that 531 joined together to form 58 joint vocational school districts; 72 school districts organized through contractual relationships to form 21 contract districts and 25 remained individual districts. While the 105 vocational planning districts achieved through the planning process was almost double the ideal number proposed in the initial plan, the 105 was significantly better than would have been required by minimum of 1,500 in the upper four in the state legislation.

The state legislature also appropriated funds for a growth in operational units to be allocated to districts for vocational education on the basis of the planned expansion of such vocational programs. The value of the operating units paid under the State Foundation program for approved vocational programs also was sufficient to encourage districts to vote the other funds necessary to provide for the operation of the vocational education facilities. The major operational funding problem which was not covered in the 1969 session of the legislature was the fact that major cities did not receive as much assistance for the establishment of vocational education programs as some of the poorer sections of the state or small districts of the state received, even though their costs for establishing vocational education and the need for vocational education were massive. Nevertheless, the major cities, as well as other sections of the state, moved to increase the programs available to youth and adults through vocational education.

The legislature meeting in 1971 revised the foundation formula so that the value of an additional vocational unit was the same in all types of school districts in Ohio without regards to the wealth of that district. Since vocational education costs more, the state legislature

deemed it wise to establish the same level of funding for vocational education units throughout all districts. The level of funding established was a salary allowance based upon a state salary allowance pattern, plus fifteen percent of that salary allowance, plus $4,000 for maintenance. During the 1972 school year the average value of the vocational unit to school districts throughout Ohio was $13,100. Students enrolled in vocational education, however, are not counted in the basic ADM allocation to a district for the period of time that they are enrolled in vocational programs. The time which students spend in the required academics is counted toward average daily membership allocations within the regular foundation program.

The 1971 session of the state legislature also provided sufficient operating funds for a broad growth in vocational education during the next biennium, and while vocational education grew significantly during that biennium, they did not allocate all of the units made available by the state legislature. The unit growth in 1972, the second year of the biennium, however, was 1,008 units, which equated to that many classes meeting for 22.5 hours per week. Not all the classes met for 22.5 hours in a week. Some received only partial units, with all partial units and full units adding up to the 1,008 growth during the 1973 school year.

The 1971 session of the state legislature did not, however, appropriate any additional funds for construction of vocational education facilities. They reappropriated for use in that biennium the $6,000,000 remainder of the initial $75,000,000 under the State Bond Issue. These $6,000,000 were quickly allocated. The approximately $6,000,000 per year in '72 and FY'73 from the Vocational Education Acts of 1968 were also allocated for construction of vocational education facilities. By the spring of 1973, when the state legislature again met to plan for the next

biennium there was an existing backlog of approximately $46,500,000 that had been voted locally and was awaiting matching at the state level for a like amount. The 1973 session of the state legislature allotted $46,500,000 from the first allocation of Federal General Revenue Sharing funds for matching of the locally voted funds. The allocation of $46,500,000 also included the interest from all revenue sharing monies and any additional revenue sharing monies received above the planned amount in order to reach the $46,500,000 to be guaranteed for matching of local funds.

In the spring of '73, however, additional school districts, including joint vocational school districts, passed their local bond issues and operating levies, creating an additional backlog of $16,500,000 voted locally to be matched at the state level. In the final sessions of the legislature before recessing on July 1, 1973, the legislature provided an additional $20,000,000 for matching of locally voted funds. This allocation, however, carries the proviso that the Department of Finance would declare quarterly the amount of funds that could be expended within the $20,000,000. The legislature also provided for a growth pattern in vocational education units of approximately 800 for each year of the biennium.

Those of us in public education, and particularly in vocational education, are very appreciative of the efforts made by the state legislature of Ohio to provide additional construction funds for vocational education. We have informed the legislature that approximately $72,000,000 additional in matching funds from the state level beyond present allotments would be required in order to achieve the goals established by the action of the 1969 session of the state legislature and the standards established by the State Board of Education.

CHAPTER 8

Organization and Operation of Typical Joint Vocational School Districts

Penta County Joint Vocational School District

As indicated earlier in the report, Penta County Joint Vocational School District was one of the two joint vocational school districts enrolling students in 1965. This district is selected for review here on the basis that it was significantly larger than the other district established in that year and the fact that it gained so much acceptance in terms of its success that it became a stimulus to the organization of additional joint vocational school districts.

Planning meetings had been held in that area now served by the Penta County Joint Vocational School District over approximately a year before the organizational effort without much success. The catalyst to bring together 25 school districts that initially formed the Penta County Joint Vocational School District was the availability of excess facilities at one of the supply depots closed by the federal government. A review of the excess facilities revealed the existence of a large size building which could be renovated at a reasonable cost to provide an effective and attractive facility with sufficient space for a broad program offering in vocational education. One of the districts, Rossford, Ohio, moved boldly to acquire the property, even before the joint vocational school district was formed, on the basis that they would transfer it to the jointure once the joint district became a legal entity. The necessary political action was taken to wrest this section of land and buildings from a private purchaser and approximately 55 acres with the building that could be remodeled was allocated to the Rossford City District.

Under the leadership of the county superintendents of the several counties and the local and city superintendents, all boards of education

were brought together in one mass meeting to review the joint vocational school district plan proposed for submission to the State Board of Education. A copy of the outline established for such plans is included as Appendix E. The twenty-five boards, in an unprecedented action, accepted the plan for submission to the State Board of Education without a dissenting vote in any of the boards. The State Board of Education at their next regular meeting approved the plan submitted by the Penta County Joint Vocational School District and in accordance with the procedure in the law, the twenty-five districts ratified the plan after the State Board approved and the jointure became a reality. The jointure organization was completed on June 15, 1965 and by the fall of 1965 monies had been voted and programs opened in the remodeled facility, with approximately 900 students in attendance. This represented unprecedented action on the part of the twenty-five boards of education and unprecedented speed under the leadership of Dr. William Ramsey, who had been selected as superintendent of the joint vocational school district by the appointed board.

The program planning processes included the establishment of advisory committees from labor and management, business and industry in the area served by the joint vocational school to identify the programs to be offered, the equipment needed in the individual programs and the curriculum content to be included in the programs. Strong support was received from all community groups, including the Chamber of Commerce and labor unions. The Chrysler Corporation indicated that one of the major factors in locating a plant in the area was the plan to establish an area vocational education facility. A two-year post-high school technical program was initiated at the same time in the same facilities, utilizing the facilities in the late afternoon and evening for full-time two-year technical programs. At that period of time only the

Division of Vocational Education in the State Department of Education was encouraging and promoting the development of two-year post-high school technical programs in the state of Ohio.

In accordance with the joint vocational school district laws, members were appointed to the joint vocational school board from each of the county boards in the five counties having districts in the Penta Joint Vocational School District, In addition, representation was assigned from the city districts and exempted village districts within the Penta County area. The initial board, therefore, totalled 11 persons and following the ratification of the JVS plan by the 25 boards of education this board met, organized according to the requirements for all city boards of education in the state of Ohio. The new joint vocational school board appointed a temporary clerk, temporary superintendent and was in business. Once the joint vocational district was formed and the board appointed, the total control of that joint vocational school district came under that joint vocational school board of education. As indicated in the joint vocational school laws, included in the Appendix, members are appointed to this board from county, city and exempted village districts having membership in the jointure and cannot serve on that board after they cease to serve on the board from which they were appointed,

Strong efforts were made to establish a guidance program relationship between the jointure and the local districts before the jointure was ever put into operation and the successful guidance and counseling efforts between the jointure and the home schools resulted in the large initial enrollment of 900 students. The program offerings at the joint vocational school included programs for the least able and the most able. Approximately 200 of the initial students enrolling had been failures in their home schools, but I would point out that there was 200 out of 900, not 700 out

of 900 students who had not been successful in their home schools. Under this pattern they found that after several months the students who had been identified as unsuccessful in their home schools had lost that distinction in the vocational school where they were placed in programs in which they could succeed. The jointure included a program called "occupational work experience" which would take any student, regardless of ability, and place him in an honest job.

The superintendent of schools, Dr. William Ramsey, wisely selected by the joint vocational school district board as acting superintendent, provided the leadership necessary to place the necessary operational levy and bond issues before the electorate and to get favorable votes on both of the issues. Dr. Ramsey then became full-time superintendent of the jointure and employed sufficient leadership personnel to move quickly to remodel, equip and get ready for operation programs in the excess facility made available by the General Services Administration.

Enrollments have increased until Penta County JVS now enrolls 1,496 students in the secondary vocational education programs, and since the physical facilities must be used also for out-of-school youth and adults, they served 2,070 adults during the 1972 school year. The initial offerings at the joint vocational school were as follows:

Agriculture Education
Horticulture
Ag mechanics

Business & Office Education
Comp clerk
Cooperative Office Education
Data Processing
High school stenographics
Office Machines

Distributive Education
Apparel and accessories

Home Economics
Child care education
Child care assistance
Community home service
Food service

Trade and Industrial Education
Auto body
Auto mechanics
Carpentry
Commercial art
Cosmetology
Dental assistance
Drafting
Electronics
Printing trades
Machine trades
Welding
Occupational Work experience

Since the opening of the school the vocational education offerings for youth and adults have expanded to include the following vocational areas:

Farm business management
Food management
Home management
Clothing management
Clerical services
Graphic arts
Radio/TV
Masonry

In addition to the vocational programs there is now an accredited technical institute under the same administration, on the same campus area, but with a separate technical education board which offers the following technical education areas on a two-year associate of science degree level:

Agriculture Education
Agriculture supplies technology

Distributive Education
Apparel and Accessories

Health Occupations Education
Nurse Assoc. degree

Home Economics Education
Child care technology

Business & Office Education
Business data processing technology
Executive secretary technology
Accounting comp.

Technical Education
Police science technology
Mechanical technology
Fire and safety technology
Electric technology

The facilities have been expanded several times since the initial building was remodeled in order to provide for the expansion of programs. During this past year a facility was completed and put into operation which was funded in a large measure by the Bureau of Vocational Rehabilitation in order to initiate programs of evaluation, exploration and training for handicapped youth in the area served by Penta County. The largest enrollment in this rehabilitation facility are educational mentally retarded youth that have not been served previously by vocational education programming. Any persons with handicaps can be considered for enrollment into the program made possible by the facility. The program has continued to grow as its success has encouraged more and more people to make use of the opportunities available.

Students under the policies governing the operation of the Penta County Joint Vocational School District remain members of their home districts in terms of their records, their official enrollment for participation in football, baseball, basketball, band, track, music and other extra-curricular activities and the students graduate from their home high schools. They are brought in to their home high schools on their regular bus routes and change over to another bus which takes them to the joint vocational school. The district farthest from the joint vocational school requires approximately 35 minutes of travel time from the home school to the jointure. A study indicated that the percentage

of students attending the joint vocational school from a participating district had no direct relationship in terms of the distance from the home school to the joint vocational school.

The students spend all day at the joint vocational school and receive approximately four and half hours of vocational education instruction, which includes instruction in skills and technical knowledge (including math and science) related to their occupational goal. They also take the required academic subjects at the joint school and graduate from their home high school with a first-grade high school diploma. They are prepared for work and the large majority of the youth go to work immediately in the occupational areas for which they are prepared. The graduates, however, may go on to a state university the same as any other graduate from a high school in Ohio. Thus the joint vocational school becomes a service center to all school districts in the jointure. There is no gymnasium, athletic field or auditorium available to the joint vocational school. Such facilities cannot be assisted from state or federal vocational education funds. As indicated earlier, students are expected to return to their home schools for extra-curricular activities, including athletics. A study during the early years of operation by the Penta County Joint Vocational School indicated approximately 35 percent of the students attending the joint vocational school participated in extra-curricular activities in their home schools. This percentage compares favorably with the percentage of high schooljuniors and seniors participating actively in extra-curricular activity within their own home school.

The joint vocational school district is also capable of providing any other services to the member district on which the member districts agree and for which there is money. Such money can be

school district or through funds paid in from the participating boards on a voluntary basis.

Penta County, with encouragement from our Division of Vocational Education, and the allocation of special project funds under EPDA, will be one of three schools in the state of Ohio that will initiate an experimental pre-professional program. The programs will be planned for those who have made a career choice in the area of the professions and will be grouped into those heading for the engineering and science professions, the health professions, the social science professions and the business professions. The curriculums will be planned to include selected areas from the disciplines and a laboratory period with this period of instruction covering approximately three-fourths of the school day. The remaining one-fourth of the day would be in common learnings, such as social studies and English, integrating students across both the vocational and pre-professional areas.

Springfield-Clark Joint Vocational School District

The districts which now form Springfield-Clark Joint Vocational School District were initially brought together by efforts of the office of the county superintendent of schools in cooperation with the superintendent of the city schools in Springfield, Ohio. While the Penta County Joint Vocational School District includes school districts in parts of five counties, the Springfield-Clark JVS includes all of the districts within the Clark County area.

Persons giving leadership to this development had a concept of an expanded vocational education program to serve students in all the districts in the county. Springfield City had some vocational education offerings and had in a previous year built a new high school, and included in that high school several newly equipped vocational education laboratories. As plans were made for the joint vocational school the

Board of Education had to go through a long, agonizing study to determine if they should join the jointure, remain independent, or insist that the jointure be built adjacent to the new high school so the new facilities could be used. This city of 82,000 could have stayed independent, even under the laws and regulations promulgated after the organization of the jointure by the legislature and State Board in 1969. The city of Springfield could provide for a minimum program of vocational education without any cooperative effort with other districts, but the other districts in Clark County could not provide even a minimum program because of their low student base and tax base. Springfield City finally made the decision to join with the jointure, to sell their equipment to the jointure and to remodel the rooms allocated to vocational education for other purposes. The reason for the decision of the Springfield City Board was the fact that while they could provide for a minimum program within their city, they could provide a much broader program for the youth of Springfield by joining with the other school districts in the county in a joint vocational school operation.

The monies voted in Springfield for the joint vocational school district were voted on more or less a pay-as-you-go basis so that long-term bonds were not sold and interest costs were kept down. A master plan for expansion of vocational programs was established. Again, as at Penta Joint Vocational School, the two-year post-high school technical institute was built on an adjacent campus and both the joint vocational school district and the technical institute are administered by the same administrator. Each has separate funding and its own separate board to set policy on the operation.

The joint vocational school board is appointed in accordance with the sections of law requiring selections of membership from city,

joint vocational school district. The technical institute board is a combination of local appointment and gubernatorial appointment. The joint vocational district comes under the leadership and control of the State Board of Education, while the technical institute comes under the leadership control of the State Board of Regents. It is my considered judgment that both of these units should be under the same board at the state level in order to: facilitate relationships between the two; saving on dollars for organization, administration and operation; and for effective implementation of educational goals for these two employment-oriented programs.

The initial offerings at the joint vocational school were as follows:

Agriculture
Agricultural cooperative training

Business and Office Education
Basic Data Processing, Jr. & Sr.
High Skill stenography
Office Machines
Cooperative Office Education

Distributive Education, Sr.

Trade and Industrial Education
Auto mechanics, Jr. and Sr.
Auto body repair
Carpentry-Building trades
Cosmetology
Drafting, Jr. & Sr.
Electricity, Jr. & Sr.
Machines trades, Jr. & Sr.
Diversified cooperative training
Occupational work experience
Dental Assistants
Licensed practical nursing

The areas that have been added since the opening of the center are as follows:

Horticulture
Occupational work adjustment
General merchandising
Food management

Mechanics
Plumbing and Pipefitting
Commercial Art
Welding
Masonry

The present offerings at the technical institute are as follows:

Agriculture Education
Horticulture technology
Ag supplies technology
Ag mechanics technology

Distributive Education
Advertising services technology

Health Occupations Education
Medical lab technician
Nurse associate degree

Business & Office Education
Executive Secretary technology
Supervisory occ. technology
Accounting comp. technology
Business data processing

Technical Education
Police science technology
Mechanical technology
Civil technology
Electrical technology

The joint vocational school district has built its operation in phases and presently projects one additional building in a third expansion effort. The technical institute has continued to expand as funds are made available under the State Board of Regents. Through an agreement with the State Board of Regents, our Division of Vocational Education continues to assist financially two-year post-high school programs in technical institutes which meet the rather rigorous standards established for such programs by our State Board of Education.

As in the case of the Penta County Joint Vocational School, the students remain members of their home school in terms of extra-curricular activities, accruing of credits to their records and for graduation. Students go into their home high schools in the morning and are transferred to the joint vocational school by bus, returning to their home schools in

time for their return bus to ride home in the afternoon. The extra travel time necessary for the students attending the jointure is gained through a shortened lunch period, and an elimination of any study halls. Again, students graduate from their home high school with first-grade high school diplomas, prepared to go to work, but a small percent will go on to college. Again, this joint vocational school district has been eminently successful in providing programs for both youth and adults and working carefully with the industry and businesses in the area to identify both the needs of people and business and industry and to move boldly to provide education services to meet their needs.

CHAPTER 9 Evaluation of Progress Towards Plan for the State

Ohio has made significant progress towards the broad goals established with the passage of the Vocational Education Act of 1963, the joint vocational school district law perfected in 1963 and towards achievement of specific plans growing out of the action of the state legislature and State Board of Education in 1969. Broad expansions of vocational education have been completed or are under construction in the major cities of Cleveland, Akron, Youngstown and Cincinnati. Funds have been voted for the expansion of vocational education and construction and will soon be initiated in Columbus, covering approximately $24,000,000 construction for vocational education. Approximately $26,000,000 for vocational education construction is on the planning boards in Toledo. Canton and Dayton have study groups determining the feasibility of additional expansions in the field of vocational education. At the present time there are 58 joint vocational school districts organized in the state of Ohio. Thirty-nine of these local districts have voted their local monies and 26 of the 39 will be in operation this fall. State and federal funds have been provided or

will be provided to match the locally voted funds in the 13 joint vocational school districts not yet operational. Additional joint vocational school districts will attempt to receive voter support at each primary and general election and at some special elections in between

Growth of the over-all enrollments in vocational education, starting with 1963 and projected to 1977, are as follows:

1963	1968	1972	Goal for 1977*
138,523	262,583	447,157	2,004,733

*Based on objectives projected to 1977 and increased funding to provide services to youth and adults.

During the 1973 school year we served approximately 28 percent of the youth eligible for vocational education at the high school level and we are working toward the minimum goal of providing facilities and equipment to serve no less than forty percent of the eligible students in vocational education by September of 1974. It is my evaluation that we may not reach the 40 percent figure throughout the state until September, 1975 or 1976. Many districts, however, have already achieved and gone beyond this minimum figure.

Some charts indicating growth of services and growth of investments of state and federal funds are as follows:

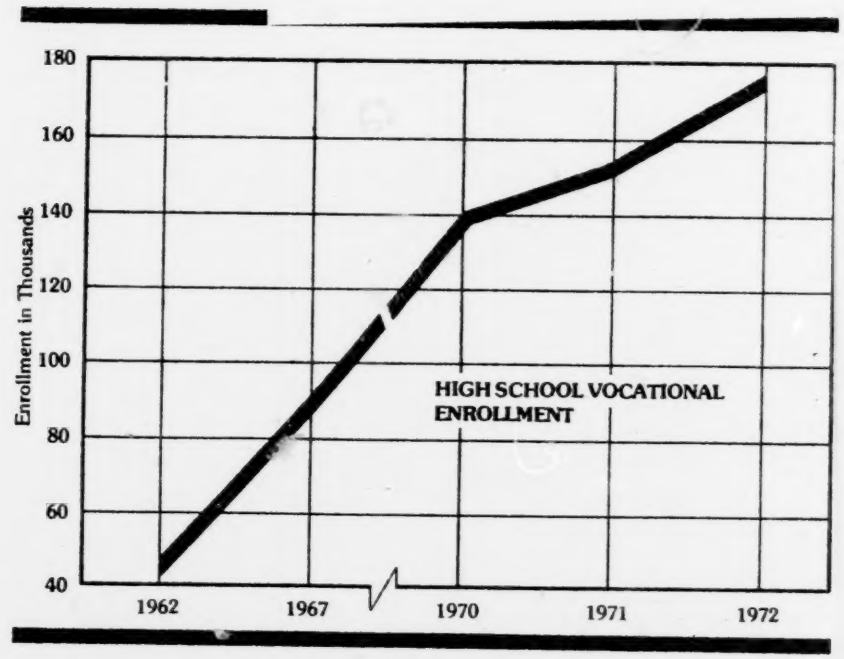
High School Vocational Enrollment

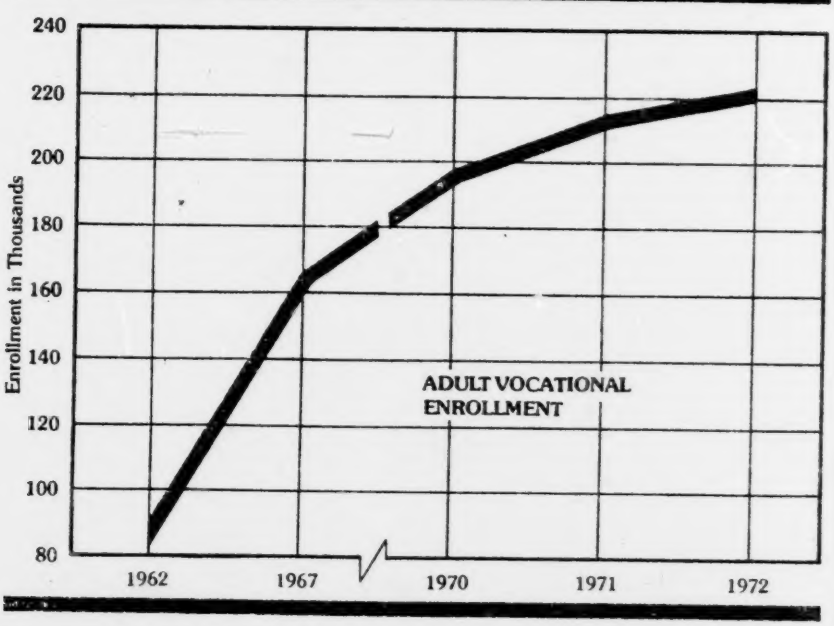
YEAR	AGRICULTURE	BUSINESS & OFFICE	DISTRIBUTIVE	HOME ECONOMICS	TRADE AND INDUSTRIAL	TOTAL
1962	11 553	380	1 166	23 650	6 881	43 630
1967	14 276	10 207	5 058	45 315	13 920	88 776
1970	16 386	21 708	10 636	62 664	27 930	139 324
1971	17 076	22 946	13 157	66 956	32 281	152 416
1972	19 684	24 485	14 567	78 654	37 628	175 018
1973	21,217	26,791	17,501	91,721	43,186	200,416
Percent of Total 1973	10.59%	13.37%	8.73%	45.76%	21.55%	100.0%

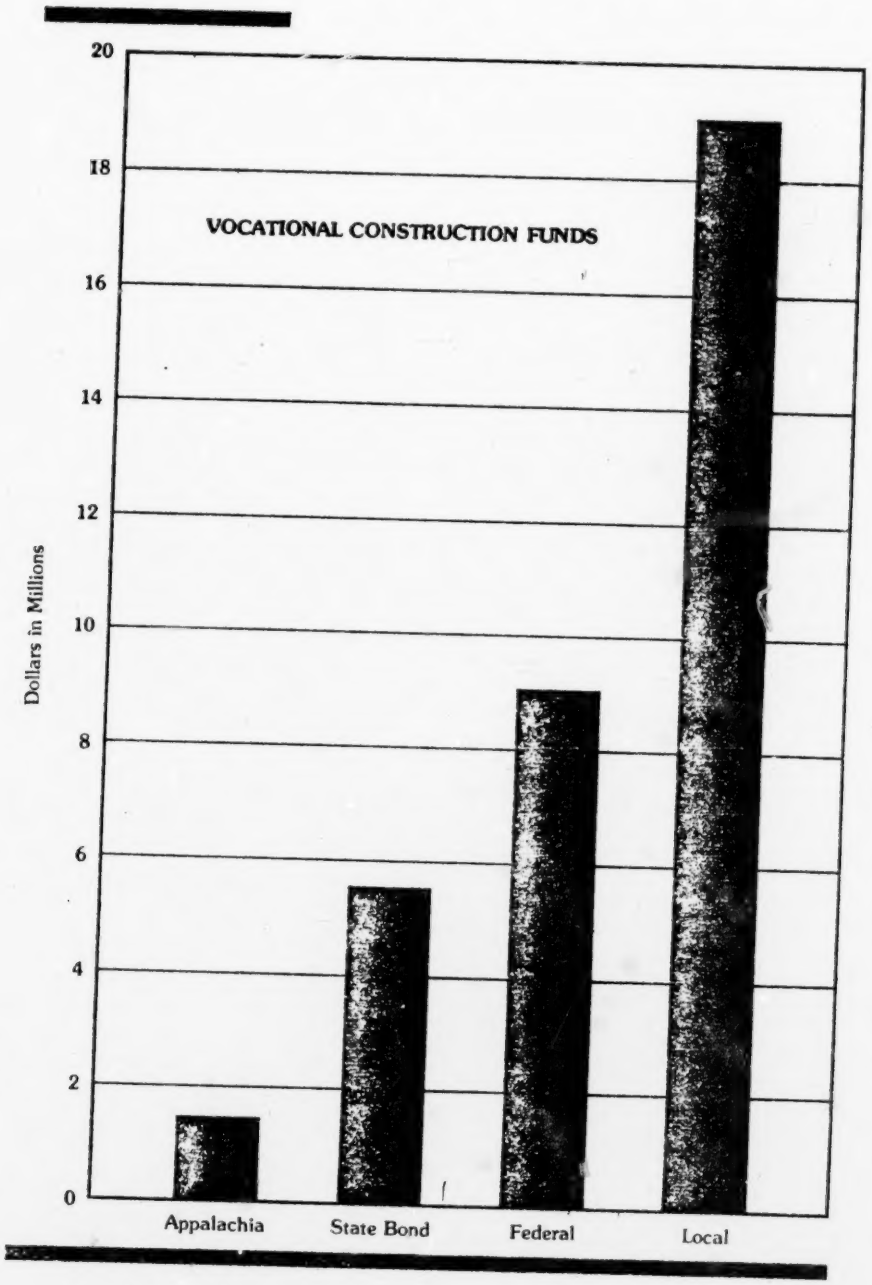
Adult Vocational Enrollment*

YEAR	AGRICULTURE	BUSINESS & OFFICE	DISTRIBUTIVE	HOME ECONOMICS	TRADE AND INDUSTRIAL	TOTAL
1962	9 074	—	9 432	19 952	44 640	83 098
1967	10 208	15 054	7 215	60 248	69 500	162 225
1970	11 620	18 914	19 626	74 303	73 273	197 736
1971	12 641	20 662	26 949	73 313	78 619	212 184
1972	14 671	29 502	30 316	66 439	79 145	220 073
Percent of Total 1972	6.66	13.41	13.78	30.19	35.96	100.00

*1973 figures not yet available


180
160
140
120
100
80
60
40
Enrollment in Thousands
1962
1967
1970
1971
1972
HIGH SCHOOL VOCATIONAL
ENROLLMENT


240
220
200
180
160
140
120
100
80
Enrollment in Thousands
1962
1967
1970
1971
1972
ADULT VOCATIONAL
ENROLLMENT



Vocational Construction Funds Allocated 1972
Source and Amount

During this past year two significant studies have been completed, one by our Division of Vocational Education under a research contract with Ohio University and the other by our State Advisory Council with Market Opinion Research. The research study supported by the State Advisory Council was concerned with cost effectiveness and was a scientific sampling of graduates and non-graduates of vocational programs. Evaluations were made on the basis of interviews done by Market Opinion Research with both the graduates and non-graduates of vocational programs and their employers. A copy of this evaluation study, showing a favorable relationship of graduates of vocational programs to the total non-graduate group is attached as Appendix F. The study included a review of attitudes toward jobs, length of employment, salaries and other factors related to job satisfaction and job success. The research study indicated that the graduates from vocational programs did not rate lower on any of the major areas included in the study and rated significantly higher on a number of the items in comparison with the non-vocational graduate group.

The study contracted by our Division with the Economics Department at Ohio University was concerned with cost benefits. Dr. Ghazalah, of the Economics Department at Ohio University, was commissioned to make a cost-benefit study on fourteen programs in Ohio high schools offering vocational training at the 11th and 12th grades during the school year of 1971. A copy of this report, Appendix G, indicated that the results of applying two measures to 1970-71 data on fourteen programs in eighteen Ohio high schools provide strong evidence that vocational education in Ohio is a socially worthwhile investment. In all but one of the vocational programs studied, median rates of return exceed the rate of interest, reflecting the opportunity costs of funds used. The program that failed to pass the test as a worthwhile investment dollar-wise provides an illustration of the

FOLLOW-UP OF PROGRAM COMPLETIONS IN PREPARATORY VOCATIONAL EDUCATION 1/
FISCAL YEAR 1972

	Total, All Programs 2/				Secondary				Postsecondary				Adult (Preparatory)			
	Nat'l Number	Ohio Number	Nat'l Percent	Ohio Percent	Nat'l Number	Ohio Number	Nat'l Percent	Ohio Percent	Nat'l Number	Ohio Number	Nat'l Percent	Ohio Percent	Nat'l Number	Ohio Number	Nat'l Percent	Ohio Percent
leted Program Requirements 3/	930,213	41,048 4/	100.0	100.0	558,322	36,940	100.0	100.0	197,951	2,645	100.0	100.0	173,930	1,463	100.0	100.0
vailable for placement	547,691	29,722	58.9	72.4	297,170	26,340	53.2	71.3	139,359	2,189	70.4	82.8	111,162	1,193	63.9	81.5
ot available for placement	258,440	9,059	27.8	22.1	203,582	8,664	36.5	23.5	32,947	308	16.6	11.6	21,911	87	12.6	6.0
tatus unknown	124,072	2,267	13.3	5.5	57,570	1,936	10.3	5.2	25,645	148	13.0	5.6	40,857	183	23.5	12.5
Available for Placement	258,440	9,059	100.0	100.0	203,582	8,664	100.0	100.0	32,947	308	100.0	100.0	21,911	87	100.0	100.0
ontinued full-time school	183,188	4,323	70.9	47.7	150,442	4,102	73.9	47.3	20,479	203	62.2	65.9	12,267	18	56.0	20.7
her reasons	75,252	4,736	29.1	52.3	53,140	4,562	26.1	52.7	12,468	105	37.8	34.1	9,644	69	44.0	79.3
able for Placement	547,691	29,722	100.0	100.0	297,170	26,340	100.0	100.0	139,359	2,189	100.0	100.0	111,162	1,193	100.0	100.0
ployed in field trained or related	4[illegible]75	23,016	76.1	77.4	207,863	19,989	69.9	75.9	118,602	2,019	85.1	92.2	90,210	990	81.1	83.0
her employment	86,721	4,982	15.8	16.8	60,630	4,777	20.4	18.1	13,109	113	9.4	5.2	12,982	110	11.7	9.2
employed	44,295	1,724	8.1	5.8	28,677	1,574	9.7	6.0	7,648	57	5.5	2.6	7,970	93	7.2	7.8

tatus of persons as of November 1972
o reports--California, Colorado, Hawaii, Indiana, Kentucky, Minnesota, Missouri, New York, Ohio, Pennsylvania, American Samoa, Puerto Rico, Virgin Islands
ncludes 72,421 persons who terminated their training in a program prior to normal completion time and were employed in field for which trained
ncludes 419 persons who terminated their training in a program prior to normal completion time and were employed in field for which trained

gs

multi-dimensional aspects of vocational education. The cost investment in child-care programs exceeds the cost benefits measured solely in terms of potential earnings. There are, however, indirect benefits associated with the acquisition of child-care training. It is our judgment that the child-care training program which is relatively new to the scene, should be continued for two or three years and be checked again to determine if it has changed in terms of its cost-benefit ratio. A copy of the placement report for Ohio, compared to placement report for the rest of the nation follows:

We believe in Ohio there has been a gradual improvement in the acceptance of vocational education by both educators and the public. Attitudinal changes come slowly and can best be detected by looking back over a period of several years and assessing the attitudinal change that has occurred rather than determining if the goal has beeen effectively achieved. Nature of the times, the changing order of the work force requiring more highly skilled workers in many jobs, the flood on the market of many college graduates who could not achieve employment in their chosen field of work, an understanding that college is not an Open Sesame to a socially and economically effective life and the promotional efforts by many public administrators, pointing out that workfare is much better than welfare, all provide a continuing input into public attitudes which will gradually overcome the attitudes built into our population that anyone who is not stupid must go to college.

I do not know of a single superintendent of schools in the state of Ohio who does not support the concept that we must provide for an expanded program of vocational education for youth enrolled in our public schools. I do not know of a single superintendent who is unwilling to see these same facilities utilized effectively to provide retraining and upgrading programs for adults.

Annually we provide a program review for improvement, development and expansion of vocational education, "PRIDE", for 20 percent of our vocational planning districts. In this program review we require the planning districts to first involve local committees from business, industry, the school and the public in a review of their programs in terms of physical facilities, curriculum, staff and student achievement. The committees prepare recommendations for program improvement, development and expansion. Our staff, then, reviews the proposals of the

local committees and makes additional suggestions regarding the recommendations and may make additional recommendations. This review is then put together in a final report and made available to all school districts in the vocational education planning district.

One part of this "PRIDE" review includes a questionnaire to students and parents in selected grade levels in the vocational education planning district. A copy of a summary of the returns from this student and parent vocational planning questionnaire for 1972 is included as Appendix H. We find that parents and students strongly support the place of vocational education in the public school system, strongly support the fact that people teaching in vocational education must be competent in the occupation before they become teachers, support the need for funding for expansion of vocational education and the study indicates that there are no significant areas of conflict between students and parents! There is, however, a higher number of students who on certain economic issues have no opinion, as one might expect. Also as a part of this program review we conduct a cost analysis of the vocational education programs in the districts included in a "PRIDE" program. A copy of the cost analysis for the last series of programs reviewed will be available in the near future.

The outlook for vocational education in Ohio is good. The growth and development of vocational education is not the function of an individual or a group, but a function of the needs of a changing society. We can no longer afford to have a high percent of our young people drop out of high school before graduation. Such youth cannot enter the labor market without a diploma and without skills and technical knowledge and compete in an economy which by 1975 will have only five percent of the jobs in the unskilled category. We can no longer hide

our failures by feeding them into the unskilled work force that existed in previous years. It is true that we must surely provide a very sound and effective program of education for the persons at the professional level in our colleges and universities. It is equally true that we must provide for a sound, broad and effective program of vocational and technical education for the large majority of our youth who will enter employment in occupations which do not require a collegiate degree.

E N D